
North Carolina State Highway Patrol

Presentation to the
Joint Appropriations Subcommittee on Transportation
March 17, 2011

Colonel Michael W. Gilchrist



Logistics and Technical Services

Captain K. M. Castelloe



Logistics Unit / Structure

❑ Support Services (Logistics Unit):

- Evaluate, purchase, inventory and issue all equipment and supplies required by the employees of the State Highway Patrol, and for the maintenance and operation of all Highway Patrol facilities to include, but not limited to, cars, uniforms, radios, speed timing equipment, in -car video cameras, supplies and office equipment.
- Sworn: 5 Members
- Non-Sworn: 33 Civilians (1 vacancy)



Technical Services Unit / Structure

- ❑ Support Services (Technical Services Unit):
 - Provide, maintain, and support the mobile data network and an uninterrupted service for network, hardware, software, peripheral equipment, for the users of the State Highway Patrol's computer network.
 - VIPER: Design, construct, support and maintain a statewide 800 MHz interoperable communications system infrastructure for all public safety agencies in North Carolina.
 - Sworn: 5 Members
 - Non-Sworn: 70 Civilians



TSU / Logistics Staffing and Costs

Troop	FTE (Mechanics, Radio Engineers, Tradesworkers)	Cost
A	13	\$592,027.49
B	13	\$546,698.50
C	12	\$480,315.14
D	12	\$597,747.48
E	12	\$492,169.55
F	11	\$534,584.39
G	12	\$500,871.10
H	13	\$621,685.06
Logistics	37	\$1,911,112.00
Technical Services	75	\$4,308,995.53



Vehicle Information / Replacement

- ❑ Effective 1 January 2011, vehicles were placed on the following schedule:
 - Troopers assigned vehicles: 100k miles
 - Sergeants assigned vehicles: 110k miles
 - First Sergeants assigned vehicles: 120k miles
- ❑ Lieutenants and above will be replaced as needed and as vehicles become available. Replaced with vehicles that are 50k plus.



Vehicle Information

- ❑ Average Monthly Mileage: 2,144 miles per member
- ❑ Vehicle Preventative Maintenance: every 6,000 miles
- ❑ Base Vehicle Cost by Type:

Type of Vehicle	Purchase Price of Vehicle
2011 Dodge Charger Pursuit Vehicle	\$22,227
2011 Chevrolet Tahoe Pursuit Vehicle	\$24,636
2011 Dodge Durango (4 x 4)	\$27,096



Vehicle Information / Equipment

- ❑ Exterior: All vehicle markings and light package (blue lights and strobe lights)
- ❑ Interior: Equipment console consisting of radios, RADAR, laptop computer, printer, and accessories (antenna, modem, etc.)

Type of Vehicle	Purchase Price of Vehicle	Equipment Price	Cost Per Vehicle
2011 Dodge Charger Pursuit Vehicle	\$22,227	\$18,551	\$40,778
2011 Chevrolet Tahoe Pursuit Vehicle	\$24,636	\$17,569	\$42,205
2011 Dodge Durango (4 x 4)	\$27,096	\$17,569	\$44,665



Vehicle Information / Assignment

- ❑ Every sworn member is assigned a Patrol vehicle.
- ❑ Critical non-sworn personnel are assigned a fleet vehicle.

Vehicle Type	Quantity Sworn	Quantity Non-Sworn	Total
Dodge Charger	977	0	977
Ford Crown Victoria	425	29	454
SUVs	276	9	285
Chevrolet Impala	37	13	50
Vans	0	4	4
Trucks	0	21	21
Total	1,715	76	1,791



Vehicle Information / Surplus Sales

- ❑ Through an agreement between SHP and State Surplus, SHP is given the authority to facilitate the sale of surplus fleet vehicles.
- ❑ Prices for each vehicle are determined based on NADA and Kelly Blue Book references.
- ❑ Prices are set just above the market trade-in value.
- ❑ These prices, once determined, are approved by State Surplus.
- ❑ Prices are re-evaluated every six months to maintain current depreciation values and the addition of new year models to be sold as surplus.
- ❑ After the price for each vehicle is approved by State Surplus, the only price allowances made are for:
 - Vehicles over 100,000 miles; \$500.00 will be reduced from the approved price.
 - For law enforcement agencies, vehicle price is reduced by 5%.
 - For agencies or individuals that purchase 10 or more vehicles in a single sale, the price of each vehicle will be reduced by 5%.
- ❑ Any other discounts such as badly damaged vehicles, driving track training vehicles or any fleet vehicles older than those listed on the current price sheet must be approved through NC State Surplus Property on an individual basis or placed on bid through NC State Surplus Property.



Fleet Fueling

- ❑ SHP maintains and manages sixty four vehicle fueling facilities, open 24/7 and one aviation fueling facility in Raleigh for the helicopters.
- ❑ Fuel is purchased through the Purchase & Contract process.
- ❑ SHP Logistics Unit manages the purchasing and payment of invoices to the fuel vendors for all of our locations.
- ❑ For the Patrol, fuel is consumed through three mains sources:
 - Our own fueling facilities (82.2%)
 - DOT fueling facilities (17%)
 - GoGas commercial credit cards (0.8%)
- ❑ Based on bulk fuel cost, we are paying \$0.14 per gallon more for DOT fuel and \$0.33 per gallon more for fuel purchased with GoGas commercial credit cards.
- ❑ Last fiscal year (July'09-June'10), the SHP purchased:
 - 3,086,050 gallons of bulk fuel
 - 600,426 gallons through DOT
 - 28,946 gallons with GoGas commercial credit cards
- ❑ 2010 maintenance cost for the entire system was \$18,901.00 with an additional cost of \$420.00 for the DENR operating permit per site and also \$100.00 for the compliance leak testing at each site.



Inventory / Clothing

- ❑ All purchasing, receiving, and distribution activities are conducted at the Logistics facility on Blue Ridge Road, which has several buildings and storage containers on-site.
- ❑ Inventory Management is provided through a Customized Access Database, provided and maintained by the Technical Services Unit of the Patrol at no additional cost beyond the Enterprise Agreement.
- ❑ Each member of the SHP has an individual file which tracks his/her uniform disbursements through the year. At the end of the Fiscal Year all records are placed in a searchable archive file to provide historical data for future planning and reference.
- ❑ SHP utilizes a “Dollar Spending” based system.
- ❑ All initial disbursement of uniform items is done at the Uniform Warehouse.
- ❑ Following initial disbursement, necessary uniforms and equipment can be obtained either through a distribution network maintained by the Patrol or by coming in to the warehouse. The distribution network provides replacement uniforms and equipment through District Supervisors on a bi-weekly basis. Warehouse personnel then fulfill those orders, and after checking them against the database, ship the items out to the various troops using the Patrol delivery truck. In this manner all members of the patrol can obtain necessary items in an efficient and timely manner.
- ❑ A complete physical inventory is done of all items in the uniform warehouse each year at the end of the Fiscal year.
- ❑ Ideally purchases would be made on a twice yearly basis. This would allow the Patrol to take advantage of the seasonal buying patterns of our suppliers, make for a more even distribution level, and lower inventory carrying costs.



Inventory / Auto Parts

- ❑ Inventory of auto parts are purchased through the low bid vendor as determined by Purchase & Contract
- ❑ Central warehouse in Raleigh has two employees who purchase auto parts, receive inventory, maintain inventory, make payments to vendors, and distribute items to nine garages. Inventory is determined by usage and vehicle make at each garage. Inventory levels are adjusted as needed.
- ❑ Inventory is distributed by the following methods:
 - SHP delivery truck
 - Drop shipping items from vendors
 - Commercial shipping companies (e.g. UPS)



Inventory / Auto Parts

- ❑ Automotive fluids are purchased from Correction Enterprises in Raleigh and delivered to each garage. Tires are purchased from the low bid vendor and drop shipped to each garage.
- ❑ In 2010, the parts warehouse total purchases equaled \$2.5M. Blanket purchase contracts for Dodge, Ford and GM parts, automotive paint, tires, batteries, filters, brake pads, rotors and windshields totaled \$2.4M. Purchase orders for support items (e.g. Safety & Emission Inspection stickers, shop towels, wiper blades, automotive lamps, etc.) totaled \$85K. Another major expense is manual and periodical subscriptions that totaled \$15.3K.
- ❑ Annual inventory values have been consistent for the past three years (2008 @ \$210K, 2009 @ \$252K, and 2010 @ \$182K). Out of 2,420 line items in current inventory, only 1,011 line items have a quantity in stock. The remaining 1,409 line items have zero quantity on hand.



Inventory / Office Supplies

- ❑ The Office Supply Warehouse manages all Warehouse Distribution functions involving:
 - Purchasing of required office supply items
 - Receiving / Stocking / Order fulfillment
 - Delivery to Troop Offices throughout the state
 - Inventory Control / Yearly Physical Inventory Counts
 - All postal mail and inter-office mail
 - 95% of all stocking items are ordered through eProcurement, approximately 5% through next day purchases
 - 5 to 6 weeks' worth of supplies ordered and orders placed when supplies are less than 1-1/2 weeks from going to 0.
 - Approx. \$265,000 in office supplies ordered from March 2010 – February 2011



Inventory / Radio Shop

- ❑ During the present fiscal year 2011, the purchase orders entered into e-Procurement by the Logistics Radio Warehouse total approximately \$597,000.00. Items include in-car video systems, speed timing equipment, and emergency lighting components.
- ❑ The State deals directly with many of our suppliers and has the ability to purchase at the same discounts as commercial manufacturers' distributors.
- ❑ At this time, Radio Logistics receives the following:
 - 25% to 45% discount on parts
 - Repairs done internally to our electronic/radio equipment avoids current industry standard costs for repair work (between \$110 and \$140 per hour)
 - 28% discount from Motorola (largest vendor of trunked radio equipment)
 - The ability to order parts from Motorola in the event of emergencies



VIPER

Michael T. Hodgson



VIPER

- ❑ VIPER: Design, construct, support, and maintain a statewide 800 MHz interoperable communications system infrastructure for all public safety agencies in North Carolina.
- ❑ The system currently has 162 of the 238 sites constructed and operational.
- ❑ 25 sites remain, network operations center, and P25 technical upgrade, all unfunded at a cost of \$65.5M
- ❑ Current usage of the system is 154 Federal Users, 9,707 State Users, and 42,208 Local Users.
- ❑ Every county is represented on the system, including 27 counties that use VIPER as their **primary** radio system.



VIPER

- ❑ To date \$125.5M has been committed to the project through US Department of Homeland Security grants to local agencies totaling \$103M and Legislative Appropriations totaling \$22.5M
- ❑ SHP provides day-to-day management of the system to include all system construction, maintenance, repairs, insurance, technical support of users and 24/7 Network monitoring with help desk support



VIPER

- ❑ 34 FTEs and 4 contract employees
- ❑ The VIPER project requires \$7.5M would be required annually to support the system
- ❑ Legislature has provided \$2.5M in recurring support (2007 session) that included 24 of 34 FTEs.
- ❑ \$125.5M has been funded to date to build the VIPER network



Questions

Colonel Michael W. Gilchrist

